

TUBO 60

surface

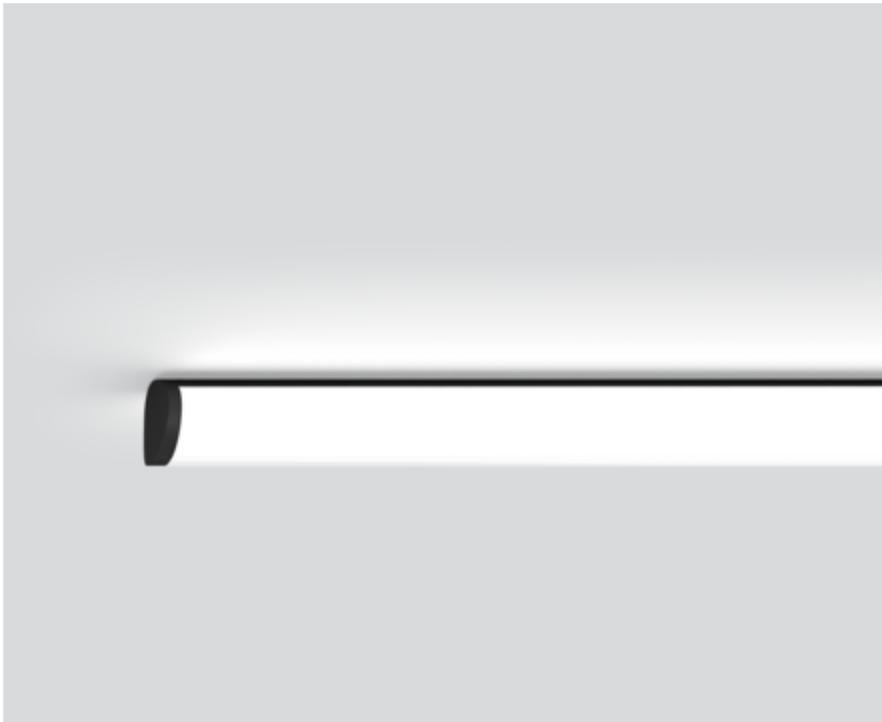
058-31155380



Project / Type

Notes

Count / Date



General

Ceiling / Wall , Surface

black , RAL 9005¹

IP20

3950 lm

2670 lm/m

LED

3000 K

CRI \geq 80

L90 / 50000 h

initial MacAdam \leq 3 SDCM

MR 0.56

MDER 0.51

Optical

High Performance Opal

opal (lambertsch)

PstLM \leq 1.0²

SVM \leq 0.4²

Electrical

DALI-2

220-240 V

system 34 W

system 116 lm/W³

PC1

1 DALI Addr.

23 W/m

Physical

length 1500 mm

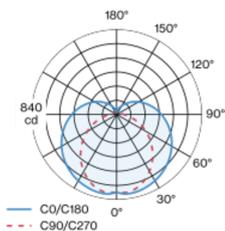
width 60 mm

height 60 mm

3.4 kg

Carrier profile made of extruded aluminium profile; light-tight end caps in aluminium; converter integrated into luminaire housing; surface black powder coated; suitable for wall or ceiling mounting; easy installation using ceiling clips; light control via high quality lens system for maximum, homogeneous illumination; light colour 3000 K; binning initial MacAdam \leq 3 SDCM; CRI \geq 80; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; cylindrical cover made of satin PMMA for uniform illumination; with gentle ceiling illumination; degree of protection IP20; PC1; incl. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

Light distribution



Product drawing



¹ RAL code ² Value of containing product at full load (undimmed)
³ FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.

Installation instructions



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Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.92	0.9
LSF	1	1	1	1	1

MF	LMF × RSMF × LLMF × LSF	RSMF ^a	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF ^a	Luminaire Maintenance Factor	LSF	Lamp Survival Faktor

^a According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	15
B13	19
B16	24
B20	30
B25	37
C10	24
C13	32
C16	40
C20	49
C25	62